

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claim 1 (currently amended): An amplification-based method for producing a promoter-containing siRNA expression cassette, comprising:

i) treating one strand of a double-stranded promoter sequence, in an amplification reaction mixture, with an oligonucleotide primer which is complementary to the 5' end of the promoter sequence;

ii) treating the other strand of the promoter sequence, in the amplification reaction mixture, with a second oligonucleotide primer which is complementary to the 3' end of the promoter sequence, wherein the second primer comprises ~~one or more sequences~~ a sequence which ~~are~~ is complementary to a sequence encoding either a sense ~~and/or~~ sequence of an siRNA molecule or an antisense sequence of a siRNA molecule, along with ~~one or both of a loop sequence and~~ a terminator sequence; and

iii) treating the amplification reaction mixture of steps (i) and (ii) in an amplification reaction at a temperature for annealing and extending said primers on the promoter sequence and at a temperature for denaturing the extension products to provide an amplified product comprising the promoter, ~~one or more sequences~~ a sequence encoding either the sense ~~and/or~~ sequence of the siRNA molecule or the antisense sequence of the siRNA molecule, and ~~one or both of the loop sequence and~~ the terminator sequence, and wherein steps (i)-(iii) are repeated a sufficient number of times to amplify the promoter-containing siRNA expression cassette.

Claim 2 (original): The method of claim 1, wherein the method is a PCR-based method.

Claim 3 (original): The method of claim 1, wherein the promoter is a Pol III promoter.

Claim 4 (original): The method of claim 3, wherein the Pol III promoter is a mammalian U6 promoter.

Claim 5 (original): The method of claim 4, wherein the U6 promoter is a human U6 promoter.

Claim 6 (original): The method of claim 1, wherein the sequence encoding the terminator sequence comprises a sequence of about 4-6 deoxyadenosines.

Claim 7 (original): The method of claim 6, wherein the sequence encoding the terminator sequence comprises a sequence of 6 deoxyadenosines.

Claim 8 (original): The method of claim 1, wherein the second primer further comprises a tag sequence to identify functional siRNA encoding sequences.

Claim 9 (original): The method of claim 8, wherein the tag sequence further comprises a restriction site useful for cloning.

Claims 10-16 (canceled).

Claim 17 (previously presented): The method of claim 1, further comprising the step of transfecting a cell *in vitro* with the amplified promoter-containing siRNA expression cassette, wherein an siRNA molecule is expressed.

Claim 18 (previously presented): The method of claim 17, wherein the cell is a mammalian cell.

Claim 19 (original): The method of claim 17, wherein one or more of the oligonucleotide primers are modified.

Claim 20 (original): The method of claim 19, wherein one or more of the oligonucleotide primers are modified by phosphorylation.

Claim 21 (original): The method of claim 17, further comprising the step of screening for a target site on mRNA sensitive to the expressed siRNA molecule.

Claim 22 (original): The method of claim 17, wherein the cell is transfected with two or more different siRNA expression cassettes.

Claim 23 (original): The method of claim 22, wherein the different siRNA expression cassettes contain one or both of a different siRNA encoding gene and a different promoter.

Claims 24-29 (canceled).